

REMARKS/ARGUMENTS

The Office Action has been carefully considered. It is respectfully submitted that the issues raised are traversed, being hereinafter addressed with reference to the relevant headings appearing in the Detailed Action section of the Office Action.

The Applicant has amended claims. The Applicant respectfully submits that the amendments to the claim set are fully supported by the originally filed specification.

Claim 1 has been amended to refer to a method of compensating for an inoperative nozzle in a bi-lithic printhead. The bi-lithic printhead includes a plurality of sets of nozzles for printing a corresponding plurality of channels of dot data. Support for these amendments can be found at paragraphs [0619], [0671], [0718] and [0746] of the description.

Claim 1 has also been amended to require the steps of:

- (a) rendering compressed pages to form a bi-level layer for a given print line intended for the bi-lithic printhead;
- (b) expanding the compressed bi-level layer;
- (c) compositing the bi-level layer to produce bi-level dots;
- (d) determining which combination of one or more available operative nozzles near the inoperative nozzle will minimise perceived error in an image that the dot data forms part of, the determination being performed on the basis of a color model;
- (e) mapping the dot data intended for the inoperative nozzle to that combination of one or more operative nozzles from the same set; and,
- (f) passing resultant bi-level channel dot data to the bi-lithic printhead.

Support for these amendments can be found at paragraphs [0745] to [0751] where operation of the Print Engine Pipeline (PEP) subsystem is described. Additionally, step (d) finds support in previous claim 11, now cancelled. Additionally, previous claim 8 has been incorporated into amended claim 1 and previous claim 8 is now cancelled.

Dependent claims 2 - 7, 9, 10 and 12, 13 and 15 have been amended as a result of the amendment to claim 1.

Claim Rejections – 35 USC § 102

The Examiner rejects claims 1, 2, 4 - 9 and 13 under 35 USC §102(b) as being anticipated by Kumar (US 6,283,572). The Examiner also rejects claims 1 and 3 under 35 USC 102(b) as being anticipated by Ballyns (US 4,932,232). The Examiner also rejects claims 1, 8 and 10 - 15 under 35 USC 102(b) as being anticipated by Eckard (EP 0 983 855 A2).

A claim is anticipated if all of its limitations are present in a single reference in the prior art. Because all of the limitations of amended claim 1 of the present invention are not present in either Kumar, Ballyns or Eckard, as discussed below, the present invention is not anticipated by Kumar, Ballyns or Eckard and the rejection is traversed. Reconsideration and withdrawal of the rejection is respectfully requested.

The present invention, as now defined in amended claim 1, is directed to a bi-lithic printhead, additionally the method makes use of bi-level dot data.

Additionally, the step of previous dependent claim 11 has been incorporated into amended claim 1. Thus, amended claim 1 requires a step of determining which combination of one or more available operative nozzles near the inoperative nozzle will minimise perceived error in an image that the dot data forms part of, the determination being performed on the basis of a color model. Inclusion of this feature distinguishes amended claim 1 from both Kumar and Ballyns as the Examiner did not raise an anticipation rejection against previous claim 11 in light of Kumar or Ballyns.

Referring to Eckard, there is no disclosure of a bi-lithic printhead or bi-level dot data being passed to the bi-lithic printhead.

Moreover, in relation to previous claim 11, the Examiner relied on col 6, lines 15 - 22 of Eckard. However, in this passage of Eckard, substitute dots are printed using at least two non-black inks selected to produce a composite dot comprising process black. However, in step (d) of amended claim 1 the combination of one or more available operative nozzles is determined on the basis of a color model, not simply the overlapping of two non-black inks to produce a process black dot.

Nevertheless, Eckard does not disclose or suggest rendering compressed pages to form a bi-level layer for a given print line intended for the bi-lithic printhead, expanding the compressed bi-level layer, and compositing the bi-level layer to produce bi-level dots, prior to determining which combination of one or more operative nozzles near the inoperative nozzle will minimise perceived error in an image.

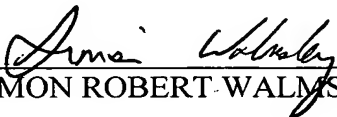
Thus, it is respectfully submitted that amended claim 1, and therefore all claims appended to claim 1, is not anticipated by Eckard.

CONCLUSION

In view of the foregoing, it is respectfully requested that the Examiner reconsider and withdraw the rejections. The present application is believed to be in condition for allowance. Accordingly, the Applicant respectfully requests a Notice of Allowance of all the claims presently under examination.

Very respectfully,

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